AYUSHDHARA
ISSN: 2393-9583 (P)/ 2393-9591 (O)
An International Journal of Research in AYUSH and Allied Systems

Review Article

GANDUSHA-UNIQUE *DINACHARYA* REGIMEN AND ITS CLINICAL APPLICABILITY

T Jagadeesh[1]*, Uma B Gopal[2], Deepshikha Kumari[3]
*[1]PG Scholar, [2]Professor, [3]3rd Year, PG Scholar Department of Shareera Rachana, Sri Dharmasthala Manjunatheswara Ayurveda College and Hospital, Hassan, India.

Article info
Article History:
Received: 14-01-2025
Accepted: 22-02-2025
Published: 20-03-2025

KEYWORDS:
Gandusha, Dinacharya, Swastha, Oral hygiene.

ABSTRACT

Ayurveda aims at maintaining a healthy body and preventing aliments by adopting a proper, healthy lifestyle. The *Swastha Chatuska* had been described in *Charaka Samhita Sutrasthana* which includes daily regimens in form of *Dincharya*. Oral cavity is such a part of the body which is constantly exposed to many risk factors in day-to-day life. The external environmental pollutants, in the form of endogenous and exogenous toxins, cause bacterial invasion in the oral cavity and leads to increase risk of oral diseases. Hence to avoid bacterial invasion, it is important to maintain a good oral hygiene. *Gandusha* is specialized therapy for good oral hygiene. But it also alleviates systemic disorders if practiced properly with different medicaments and combination. Regular practice of *Gandusha* will help to regain good hygiene. *Gandusha* is used for both as preventive and curative for oral diseases. It is explained as one of the routine regimens *(Dinacharya*) for the maintenance of good oral health and also beneficial of overall health of a person. Hence, the present review article highlights the concept of *Gandusha* and its impact on oral hygiene.

INTRODUCTION

Gandusha and *Kavala* are the two terms specified under *Dinacharya* regime, which has to be understood, as both are related with medicated decoction (or) oil held in mouth as a part of daily healthy habit that one should follow. There is slight difference between *Gandusha* and *Kavala* and its health benefits also differ in different diseases/disorders whether it's affect may be local or general i.e., on the whole body. Hence the literature is reviewed for understanding the regime *Gandusha* and its utilization.

Review of literature

Definition of *Gandusha* and how it differs from *Kavala?*

As per *Sushruta*

The quantity of liquid which can be moved from place to place inside the mouth easily is known as *kavala* (gargling) and that quantity which cannot be moved inside is known as *Gandusha* (mouthful)[2-5].

Access this article online	
Quick Response Code	
	https://doi.org/10.47070/ayushdhara.v12i1.1943
	Published by Mahadev Publications (Regd.) publication licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0)

Gandusha and *Kavala*

Both these are explained as *Bahya roopi shamana chikitsa* in most of *Urdhvajatrugata vikara* especially *Mukharoga*. *Gandusha* differs from *Kavala* in following aspects.

1. Quantity of *Dravya*- Quantity of *Drava* that is to be retained in mouth in *Gandusha* is to its full capacity. Where as in *Kavala* quantity is such that *Drava* can be moved inside the mouth.
2. Movement of *Drava*- In *Gandusha drava* that is retained in mouth should not be moved as compared to *Kavala drava* which can be moved.
3. *Vaya or Avastha anusasra*- in childhood and old age usually *Kavala* is preferred. Because in children proper tone of the muscles of oral cavity is not attained so to strengthen it act of *Kavala* is to be performed. In old age muscles becomes flaccid and lose their tonicity due to degenerative changes. Hence *Kavala* is indicated.
4. *Dravya swaroopa* (consistency)- The *Swaroopa* of *Dravya* in *Kavala* is usually *Kalka* whereas in case of *Gandusha* it is *Drava.*
5. Indication in *Vyadhi*- Usually *Gandusha* is preferred in condition of oral cavity characterized by *Vedana, Shotha, Srava* as *Drava* is not moved inside the mouth otherwise it aggravates condition. *Kavala* is

indicated in the *Vyadhis* where there is *Adhika kapha sanchaya* in mouth*, Guruta, Jadhya, Alasya (Kaphaja Vyadhi)* and *Ardita.*

But generally, *Samyak, Heena, Atiyog lakshana* and benefits of both *Kavala* and *Gandusha* are considered to be same.

Gandusha in *Dinacharya*

Kashaya of *Ksheri vriksha* has to be used for washing the *Mukha* for *Swastha* person to prevent diseases that may be caused due to *Rakta* and *Pitta*.

Dalhana commenting on this opines that *Ksheerivriksha* means *Nyagrodhadi gana dravyas. Kashaya* of this is used for *Gandusha (Antarmukha prakshalana)* to prevent or cure *Rakta dusthi janya vyadhis*. *Kwatha* of *Ksheeri vriksha* is used for *Kavalagraha* to alleviate *Arochaka, Asyavairasya, Malinata, Pooti (Mukha dourgandata)* and *Praseka*.

Gandusha has been explained with to intentions (objectives).

1. Preventive (prevention of the diseases)
2. Health promotive (by improving the oral hygiene)

Tila taila has been mentioned for *Nitya gandusha* and benefits are explained as fallows. It gives strength to *Hanu sandhi*, improves voice, does proper *Upachaya* (nourishment) of *Vadana* (oral mucosa), and improves taste perception. Person will not suffer from *Kantha Shosha*, cracking of the lips, falling of teeth. Gum tissue becomes firm. There will be no *Danta harsha* or *Danta shoola*[6].

Gandusha Types according to different *Acharya* [7,8,9]

As per *Astanga Hrudaya*	As per *Sharangadhara*	As per *Astangha sangraha*
1. *Snigdha*	1. *Snaihika*	1. *Snaihika*
2. *Samana*	2. *Samana*	2. *Samana*
3. *Shodhana*	3. *Shodhana*	3. *Shodhana*
4. *Ropana*	4. *Ropana*	4. *Ropana*

Rasas Mentioned as per 4 types of categorizations

Gandusha Types	As per *Astanga sangraha*	As per *Sharangadhara*	As per *Astangha sangraha*
1. *Snigdha*	1. *Swadhu* 2. *Amla* 3. *Patu*	*Vata - Snigdha, Ushna*	*Madhura, amla, lavana*
2. *Samana*	1. *Kashaya* 2. *Madhura*	*Pitta - Swadhu, Sheeta*	*Tikta, Kashaya, Madhura*
3. *Shodhana*	1. *Thikta* 2. *Amla* 3. *Katu* 4. *Patu*	*Kapha- Katu, Amla, Lavana ushna*	*Katu, Amla, Lavana*
4. *Ropana*	1. *Kashaya* 2.*Thikta*	*Kashaya, Tikta, Madhura katu*	*Kashaya, Madhura*

Dosages of *Gandusha* according to different *Acharya*

According to *Astangha Sangraha*

Acharya Vagbhata mentioned that *Gandusha* dosage is 1 *Kola* (6 grams).

The patients have to fill the mouth with medicated liquid or paste, either half (1/2), one third (1/3) or one fourth (1/4) depending on clinical conditions of patients[10].

According to *Sharangadhara*

One *Kola* by measure is the dose of either a liquid or a powder of *Gandusha,* while for *Kavala* the dose of *Kalka is* one *Karsha*[11].

Gandusha Vidhi

According to *Astangha Hridhaya*

The person is made to sit in a place devoid of heavy breeze but having sunlight, attentive towards treatment. He should be given *Mridu sweda* and *Abhyanga* over his *Gala*, *Kapola,* and *Lalata*. He should be asked to hold the liquid in his mouth, raising his face little up. He should not drink the liquid. Filling the mouth with half, one third and one fourth of its capacity is the *Pravara, Madhyama* and *Avara matra* respectively for liquid.

Again, the person should be given *Mridhu sweda* and *Abhyanga*. Excited by these *Kapha* moves into the mouth (from other parts). The liquid should be retained in the mouth till the cheeks show the signs of

Kapha accumulations and secretion via the nostrils and eyes or till the disappearance of the *Kapha* by the action of the *Dravya*. In this way three, five, seven times gargles should be done or till the signs appear as described under *Samyak dhoomapeeta lakshana*[12,13].

According to *Sharangadhara*

Gandusha and *Kavala* are advocated after the age of five years. The person subjected for the therapy should be seated comfortably and take mild fomentation fore head neck and shoulder give. Person is asked to take the liquid into the mouth and hold it till mouth gets cleared of accumulation *Kapha* or other dosas or till he gets secretions inside his nostrils. At a stretch three five seven gargles can be done to get rid of the *Dosa*[14].

Drugs used for *Gandusha* and its benefits

According *to* Sushruta

Gandusha liquids in the mouth are made with *Tila Nilothphala sarpi sharkara* or *Kshira* added with honey.

It mitigates burning sensation due to burning of the mouth caused by very hot liquids strong alkalis or poisonous substance like tobacco[15].

According to Charaka

The advantages of *Taila gandusha* is provides strength of jaws increase in the power of voice develops the shining of face and cheeks increase the taste perception good taste for food doesn't afflicts dryness of mouth and throat not worried about cracking of lips decay of teeth will be arrested teeth becomes rooted toothache will not occur there is no oversensitivity by *Amla rasa* able to eat hard substances[16].

According to *Astanga Hridaya*

Holding *Dhanyamla* in the mouth removes distaste, dirt and bad smell from the mouth. The same *Dhanyamla* without salt is the best for coldness and for dryness of mouth. Holding *Ksharambu i*n the mouth quickly breaks up the accumulation of *Kapha.* Holding comfortable warm water furnishes lightness of mouth. Holding honey in mouth removes sliminess rapidly, heals ulcers, relieves burning sensation and thirst[17].

According to *Astangha Sangraha*

In case of hypersensitivity and looseness of teeth, the disease of the mouth involving *Vata* predominance need to gargle with warm or cold solution of sesame paste or sesame oil or meat soup daily.

In case of burning sensation, formation of ulcers, traumatic wound, poison, burns due to heat or alkalis have to gargle with milk which clears the accumulation of dirt and heal the ulcers. Gargling with honey relieves burning sensation and thirst with sour gruel prepared with grains relieves bad taste in mouth, dirt and bad smell the same without salt and used cold relieves dryness of mouth, specially gargling with alkaline water break ups the accumulation of *kapha*[18].

According to *Sharangadhara*

For *Snaihika gandsha* a paste of *Tila* with water or milk and oil is ideal. *Tila, Nilotphala,* ghee, sugar, milk and honey together forms a good gargle for burning of the mouth and throat. Honey alone used as *Gandusha* clears ulcers alleviates burning sensation and thirst. Ghee is to be used as gargle in case of poisoning and scalds by alkalis or fire in case of shaky teeth gargle with *Thaila* with *Saindhava* is ideal. Gargling with *Kanjika* is good for dryness of mouth and *Vairasya* mixed with *Saindhava trikatu rajika ardraka* it is effective in disorders of *Kapha* gargle of *Triphala* and honey mitigates *Kapha, Rakta* and *Pitta*[19].

Samyak yoghadhi lakshana

According to Susruta

Swasthya (restoration of health) -Diminution of disorders, filling of non-sliminess (cleansing in the mouth), lightness of the mouth (freshness), clarity of sense organs (increased perception).

***Heena yoga lakshana*- Includes**

Appearance of *Jadhya* (lassitude), *Arasa Jnana* (loss of taste perception), *Aruchi* (bad taste), *Praseka* (excessive salivation) *Upalepa* (coating of dirt inside the mouth), *Kaphothkesha* (excitation of *Kapha*).

***Atiyoga lakshana*- Includes**

Mukha Shosha (dryness of mouth), *Paka* (Ulceration of oral cavity), *Klama* (weakness), *Aruchi* (loss of taste) *Hridaya drava* (discomfort in the chest region*), Svarasada* (weakness of voice), *Karnanada* (ringing in ears), *Trishna* (thirst) [20].

DISCUSSION

Overall health benefits

Reduces plaque and bad breath along with gum inflammation. The antimicrobial properties of medicated oils used for *Gandusha* or in other way oil pulling prevent tooth decay and promote healthy teeth and healthy gum tissue.

Detoxification benefits of *Gandusha*

Removes toxins and reduces inflammation by anti-inflammatory properties of oil.

Systemic benefits

Boost immune system by stimulating the lymphatic system, reduces stress and anxiety, *Gandusha* will have calming and relaxing effect by the medication prepared with combination of such drug that have properties that reduces stress and anxiety, *Gandusha* improves skin health by reducing inflation and promoting healthy skin tissue.

Mode of Absorption

Buccal absorption

The medicament is absorbed through buccal mucosa which is the lining membrane of cheeks and gums.

Sublingual absorption

The medicament is also absorbed through sublingual mucosa that lines under surface of tongue.

Gingual absorption

The medicament will also be absorbed through the mucosal lining membrane of gums.

Mechanism of absorption

Passive diffusion

The medicament is absorbed through passive diffusion, where the molecule diffuses through the mucosal lining into the blood stream.

Active transport

The components of medicament may be absorbed through active transport where the molecules are transported across the mucosal lining depending upon factors influencing absorption and lipid solubility. Medicine influences its absorption with more lipid soluble components being absorbed more easily.

Molecular weight

The molecular weight of medicament also influences its absorption with smaller molecules being absorbed more easily.

PH and Temperature

Mouth ph. and temperature also influences the absorption of medicament.

Systemic availability

When compared to *Kavala* the *Gandusha* is held in mouth for a longer period with the quantity also more that pressure over the lining mucosa and is more absorptive which is absorbed to the blood vascular system and may have certain systemic benefits.

The effect on *Gandusha* in nervous system

Gandusha reduces stress and anxiety by stimulating the parasympathetic nervous System that promote relaxation this practice may also help improving sleep quality by reducing stress and anxiety.

Relieves headache and migraines *Gandusha* helps to relieve tension headache and migraine reducing inflammation and promoting relaxation. Improves cognitive function including memory and concentration, by improving blood flow to the brain.

Possible Mechanism of Action

The stimulation of trigeminal nerve *Gandusha* stimulates 5th cranial nerve responsible for transmitting sensory information from the face to the brain this stimulation may reduce stress and anxiety.

Increased production of neurotransmitters *Gandusha* helps in production of serotonin and dopamine which are helpful in mood regulation and relaxation. Reduced inflammation, which contributes to various neurological disorders.

Potential benefits of *Gandusha* in blood vascular system

Improves blood circulation, it stimulates the lymphatic system and promotes removal of toxins from the body. Reduces inflammation, the anti-inflammatory property of *Gandusha* reduces inflammation in the blood vessels and improves blood flow and thereby reduces risk of cardiovascular diseases.

Lowers blood pressure

The antioxidant present in the oil or *Kashaya* prevents formation of plague in arteries reducing risk of atherosclerosis.

General mode of action of *Gandusha*

Even though *Gandusha* is *Sthanika Chikitsa* its action can be understood as both

1) Local action
2) Systemic action

Local action

Gandusha has many actions locally, they are as follows,

Increases local defense mechanism.

Enhancing both mechanical and chemical digestion of food that starts in the mouth.

Removal of metabolic waste (urea and uric acid),

Soothing effect.

Strengthening of muscles of the oral cavity.

The action of *Gandusha* (holding a mouthful of liquid) exerts increased mechanical pressure inside the oral cavity. So, this increased pressure stimulates the pressure receptor (stretch reflex) that is present in the mouth. Once the pressure receptor is stimulated it sends signals to salivary nuclei in the brain stem (pons and medulla). As a result, parasympathetic nervous system activity is enhanced, and motor fibers in the facial (VII) and glossopharyngeal (IX) nerve trigger resulting in increased output of saliva. The Chemical constituents in the drug also stimulate chemoreceptors in the mouth, increasing salivary secretions. An enzyme called lysosome present in saliva is bacteriostatic in action. It will not allow for the growth of pathogenic microorganisms in the oral cavity. Antibody IgA present in saliva also protect against microorganisms. Thus, *Gandusha* increases local defense mechanisms.

The enzyme salivary amylase presents in saliva and lingual lipase secreted by the lingual gland present at the dorsum of the tongue initiates the digestion of

carbohydrates and fats respectively. *Gandusha* increases the secretions of these enzymes. Excessive salivary secretion, which predominantly contains water, removes metabolic wastes present in the oral cavity. Some of the *Dravya* used for *Gandusha* like *Panchavalkala* produces soothing effect on lesions like ulcers thus preventing ulcers from physical and chemical injury.

The act of *Gandusha* and *Kavala* gives proper exercise to the muscles of the cheeks, tongue, lips and soft palate there by increasing the motor functions of these muscles.

Systemic Action

The mucosal layer inferior to the tongue (sublingual) is thin and highly vascular enough to permit the rapid absorption of lipid-soluble drugs into the systemic circulation. Some of the drugs irritate the oral mucosa (by their chemical nature) and increase vascular permeability.

Thus, an active principle of *Dravya*, gets absorption in systemic circulation. Most of the *Dravya* (*kwatha*) given for *Gandusha* are warm (*Sukhoshna*) so raised temperature causes increased vascular permeability thereby enhancing systemic absorption of drugs.

CONCLUSION

Gandusha is considered as one of the *Dinacharya* regimen which has been practiced for centuries. It does have local and systemic benefits, if followed meticulously with different combination of drugs and its usage in the form of decoction oils or ghee preparations. The dosage of *Gandusha Dravya* is also equally important along with the time duration, it is held in the mouth. Though the above-mentioned health benefits are there, there is need of research and observations to be documented as there is limited scientific evidence to support the health benefits of *Gandusha*.

REFERENCES

1. Amarasimha, Krsnaji Govinda Oka; Namalinga anusasana (Amarakosha) of Amarasimha; Commentary (Amarakoshod-ghatana) Kshirasvamin; Sagwan Press; 2015.
2. Srikantha Murthy K R., Illustrated Sushruta Samhita with Text, English Translation, Notes, Appendices and index, Chikitsa Sthana; Chapter-40, Verse-14, Volume-2 Varanasi; Choukhamba Krishnadas Academy; Varanasi; reprint edition 2023 P- 404.
3. Srikantha Murthy K R., Vagbhata; Astangha Hrdayam; English Translation, Notes, Appendices and index, Sutra Sthana Chapter 22, Verse-11, Volume-1 Varanasi; Chaukhambha krishnadas academy; Reprint Year 2022. P-271.
4. Srikantha Murthy K R., Astanga Samgraha; Vagbhata Text, English Translation, Notes, appendices and index, Suthra Sthana Chapter-31, Verse-10, Volume-1 Varanasi: Chaukhambha Orientalia; Third Edition 2000. P-534.
5. Srikantha Murthy K R., Sarangadhara-Saṃhita; A treatise on Ayurveda Uttara Sthana Chapter 10, Verse-4, Varanasi: Chaukhambha Orientalia; Third Edition;1997 P-233.
6. Srikantha Murthy K R., Vagbhata; Astangha Hrdayam Text, English Translation, Notes, Appendices and index, Sutra Sthana Chapter 2, Verse-6, Volume-1 Varanasi; Chaukhambha Krishnadas Academy; Reprint Year 2022. P-23.
7. Srikantha Murthy K R. Vagbhata Astangha Hrdayam Text, English Translation, Notes, Appendices and index, Sutra Sthana Chapter 22, Verse-1-2, Volume-1 Varanasi; Chaukhambha Krishnadas Academy; Reprint Year 2022. P-269.
8. Srikantha Murthy K R., Sarangadhara-Saṃhita; A treatise on Ayurveda Uttara Sthana Chapter-10, Verse-1-3, Varanasi: Chaukhambha Orientalia; Third Edition;1997 P-233.
9. Srikantha Murthy K R. Astanga Samgraha, Vagbhata Text, English Translation, Notes, Appendices and index, Suthra Sthana Chapter 31, Verse-2, Volume-1 Varanasi: Chaukhambha Orientalia; Third Edition 2000. P-532.
10. Srikantha Murthy K R., Astanga Samgraha; Vagbhata Text, English Translation, Notes, Appendices and index, Suthra Sthana Chapter-31, Verse-9, Volume-1 Varanasi: Chaukhambha Orientalia; Third Edition 2000. P-534.
11. Srikantha Murthy K R., Sarangadhara-Saṃhita; A treatise on Ayurveda Uttara Sthana Chapter-10, Verse-4-5, Varanasi: Chaukhambha Orientalia; Third Edition;1997 P-233.
12. Srikantha Murthy K R., Vagbhata; Astangha Hrdayam Text, English Translation, Notes, Appendices and index, Sutra Sthana Chapter-22, Verse-10-11, Volume-1 Varanasi; Chaukhambha krishnadas academy; Reprint Year 2022. P-271.
13. Srikantha Murthy K R., Astanga Samgraha; Vagbhata Text, English Translation, Notes, Appendices and index, Suthra Sthana Chapter 31, Verse-9-11, Volume-1 Varanasi: Chaukhambha Orientalia; Third Edition 2000. P-534.
14. Srikantha Murthy K R., Sarangadhara-Saṃhita; A treatise on Ayurveda Uttara Sthana Chapter-10, Verse-5-7, Varanasi: Chaukhambha Orientalia; Third Edition; 1997 P-233.
15. Srikantha Murthy K R., Illustrated Sushruta Samhita, English Translation, Notes, Appendices and index, Chikitsa Sthana; Chapter 40, Verse-67-

68, Volume-2 Varanasi; Chaukhambha krishnadas academy; Varanasi; reprint edition 2023 P- 405.
16. Shashirekha H K; Charaka Samhita Sanskrit Text; English Translation; Suthra Sthana; Chapter-5; Verse-78-80; Volume-1 Chaukhambha Publications; 2017 P -103.
17. Srikantha Murthy K R. Vagbhata; Astangha Hrdayam Text, English Translation, Notes, Appendices and index, Sutra Sthana Chapter-22, Verse-3-9, Volume-1 Varanasi; Chaukhambha Krishnadas Academy; Reprint Year 2022. P-270-271.
18. Srikantha Murthy K R., Astanga Samgraha, Vagbhata Text; English Translation, Notes, Appendices and index, Suthra Sthana Chapter-31, Verse-4-8, Volume-1 Varanasi: Chaukhambha Orientalia; Third Edition 2000. P-533.
19. Srikantha Murthy K R. Sarangadhara-Saṃhita; A treatise on Ayurveda Uttara Sthana Chapter-10, Verse-8-13, Varanasi: Chaukhambha Orientalia; Third Edition;1997 P-233-234.
20. Srikantha Murthy K R. Illustrated Sushruta Samhita with Text, English Translation, Notes, Appendices and index, Chikitsa Sthana; Chapter 40, Verse-65-66, Volume-2 Varanasi; Chaukhambha Krishnadas Academy; Varanasi; reprint edition 2023 P- 404.

Cite this article as:
T Jagadeesh, Uma B Gopal, Deepshikha Kumari. Gandusha- Unique Dinacharya Regimen and its Clinical Applicability. AYUSHDHARA, 2025;12(1):94-99.
https://doi.org/10.47070/ayushdhara.v12i1.1943
Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**
Dr. T Jagadeesh
1st Year PG Scholar,
Department of Shareera Rachana,
Sri Dharmasthala Manjunatheswara Ayurveda college and Hospital, Hassan, Karnataka.
Email: jagadeesh99t@gmail.com

Disclaimer: AYUSHDHARA is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. AYUSHDHARA cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of AYUSHDHARA editor or editorial board members.